

News and Features

United States considers ban on British blood

Scott Gottlieb, New York

A federal advisory panel to the US Food and Drug Administration has recommended barring people who visited Britain frequently or for long stays between 1980 and 1996 from donating blood in the United States because of the possible risk of transmitting the human form of bovine spongiform encephalopathy, known as new-variant Creutzfeldt-Jacob disease.

The administration is not bound by the advisory panel's recommendations but generally follows them. New-variant Creutzfeldt-Jacob disease has never been transmitted through blood except during experiments in which it was injected into the brains of mice. But panel members, drawn mostly from the clinical medicine and medical research communities, say that they are concerned that scientists have not fully ascertained how the disease is spread. "The day you find out that there is human transmission, you're too late to protect the blood supply," said Linda Detwiler, senior staff veterinarian for the US Department of Agriculture and a member of the advisory panel.

The American Red Cross is worried that between 35,700 and 2 million units of blood would be lost if the advisory panel's recommendation took effect. Almost 23% of all blood donors have traveled to Britain during the time in question. "These are precaution-



Blood from the United States is preferred to that from the United Kingdom.

ary measures based on theoretical risks," said Richard Davey, a spokesman for the American Red Cross, which supplies about 50% of blood in the United States. "It's very unsafe not to have enough blood."

The advisory panel's members were split on the decision, with 12 members voting in favor of the recommendation and 9 voting against it. The panel members were also divided over the question of how much travel time to Britain should disqualify people from donating blood. Some panel members recommended as few as 4 months, whereas others said a year or more.

The Blood Safety Committee of the Department of Health and Human Services is expected to meet soon to consider the issues raised by the advisory panel. This committee has a broader mandate to consider the economic and political ramifications of any decision, and as a result their recommendations are likely to carry more influence with the Food and Drug Administration. If the committee recommends that certain blood products be excluded, the ban could come into effect within a few months.

Surgeons develop composite bone transplants

Deborah Josefson, San Francisco

Composite bone transplants using cadaveric and host bone may become a standard method of repairing bony defects. A 6-year-old boy, Adam Johnson, underwent this pioneering procedure 9 months ago and has shown good results.

Adam lost most of his humerus to cancer and faced the choice of further amputation and a prosthesis or the experimental procedure. Orthopedists at Joe DiMaggio's Children's Hospital and at Shands Hospital in Gainesville, Florida, performed the surgery, in which they fused the humerus from a cadaver to a portion of Adam's fibu-

la and transplanted it to the area of his humerus.

Although cadaveric bone transplants are not new, fusing them to a live bone is. The fusion allows continued bony growth because the host's vascular supply and cartilaginous cap are preserved, a feature especially important for children. If a cadaveric bone alone or a ceramic composite were transplanted, the patient's limb would not achieve adult dimensions.

Commenting on the case, Michael Jofe, a member of the bone transplant team, said, "A recent test has shown that the growth cartilage and blood supply to the transplanted

fibula remain intact. There has already been evidence that the bone is growing."

In the United States, about 250,000 people a year undergo orthopedic allotransplants, but only a small number of these are cadaveric. The cadaveric bone is typically tested for infectious diseases and sterilized by gamma irradiation. It may be further prepared by demineralization and by drilling it with laser holes, thought to help incorporate the bone into the host. Unlike patients receiving organ transplants, those receiving cadaveric bone transplants do not require immunosuppressive drugs.